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Attached

Date April 16, 1943

Subject Health and Safety

By J. N. Wilson

To F. B. Vaughan

F. B. Vaughan

Hylen
Chert

Frankenberg
X File

Before reading this document, sign and date below

Name	Date
<u>F. B. Vaughan</u>	<u>4/17/43</u>
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<u>Frankenberg</u>	<u>4/28/43</u>

Name	Date

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CLASSIFICATION CANCEL

DATE SEP 17 1963 *Cu*
For The Atomic Energy Commission

H. R. Canale
Chief, Declassification Branch U M

- 1 - Vaughan
- 2 - Greenewalt, Graves, Williams, DeRight, File
- 3 - Graves, Technical Group, File
- 4 - Kanne
- 5 - Miles
- 6,7 - Whitaker
- 8,9 - Evans
- 10 - Chronological

April 16, 1943

TO: F. B. VAUGHAN

FROM: JOHN N. WILSON

HEALTH AND SAFETY

1. Waste Disposal at Site X
2. Stack Meter for Chemical Separation Plant

(1) Waste Disposal - The following remarks are given as a preliminary report of what occurred at the Radiation Instrument Coordinating Committee meeting on April 13, 1943. I presented the information which you had collected on the waste disposal plans for Site X. The points discussed are as follows:

1. Dr. Stone requested a memorandum of the detailed plans for waste disposal at Site X with special reference to what will be put in the river.
2. For the health and safety record each pond and tank should be sampled about every two hours and the hard and soft gamma and beta radiation fractions be determined. A 24-hour integrated sample was also to be tested for long time decay. The committee decided that two counters in the chemical control laboratory would be necessary for this waste sampling.
3. It was Dr. Stone's opinion that the wastes going into the river must be kept at a very low level of radiation, approaching pure water.

(2) Stack Meter - Dr. W. R. Kanne, of the Chicago instrument group, has specified the stack monitoring instrument as follows:

1. Both diluted and undiluted gas are to be tested.
2. Both instruments can be located in a room at the base of the stack.
3. The room should have a floor space of about 50 square feet, and should be equipped with a table or work bench and a standard (19 inch) radio relay rack about 6 ft. high.
4. The actual instruments are to be located in two boxes on the outside of the room. Provisions should be provided for delivering and removing the gas samples from these boxes. Wires will then lead from the instruments to the circuits mounted on the relay racks. The instruments and circuits will be supplied by Chicago, the remainder of the facilities by Du Pont.
5. There will be no back pressure in the instruments over that of the open pipe. The flow required from the undiluted gas is 50 cc/sec and from the diluted gas 500 cc/sec. The two piping systems should be far enough apart so that they will not affect each other by radiation.
6. All recorders required will be supplied by Du Pont and located at their convenience, perhaps at the control panel for the dissolving cell. These requirements are to be made known to Kanne as soon as possible.
7. Flow indicators and suitable warning lights should be provided to insure that the instruments are receiving the required sample flow.

JOHN N. WILSON, TECHNICAL DIVISION

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